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Scientific and Technical Information Center

SEARCH REQUEST FORM

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Earliest Priority Da	ite:			
etected species or some su	res, hereer extrangm	is, acronyms, and registry numb	elly as possible the subject matter to be so cas, and combine with the concept or unitations, authors, etc., if known.	nerched. Include the Hity of the invention.
For Sequence Searches	Only Please include	all pertinent information (pared	t, child, divisional, or issued patent num	bers) along with the
appropriate servet numbe	t g kin	roctic ació	1, child, divisional, or issued patent num	itine & &
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				REFERENCE BR
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			在于这条常长是我的的表现实的常识有有的的意思的。 	
STAFF USE STAFF	Fuller	Type of Search NA Sequence (#)	Vendors and cost where appl	
Searcher Ubone #:		AA Sequence (#)	Questel/Orbit	
Searcher cocation	//	Security (#)	Westlaw	
Semeher constrain	11/21/05	Rib!lographic	In-house sequence system	•
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Searcher Prep & Revina Tim		Fulltext	Other (specify)	
Online Time:				



STIC Search Report

STIC Database Tracking Number: 171716

TO: Ben Sackey

Location: REM 5B31

Art Unit: 1626

November 21, 2005

Case Serial Number: 10/698451

From: Kathleen Fuller Location: EIC 1700 REMSEN 4B28

Phone: 571/272-2505

Kathleen.Fuller@uspto.gov

Search Notes

missing on the carboxy group of the propanaminium.								



=> FILE REG

FILE 'REGISTRY' ENTERED AT 16:50:20 ON 21 NOV 2005
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 20 NOV 2005 HIGHEST RN 868524-25-8 DICTIONARY FILE UPDATES: 20 NOV 2005 HIGHEST RN 868524-25-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> FILE HCAPLU

FILE 'HCAPLUS' ENTERED AT 16:50:30 ON 21 NOV 2005
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FILE COVERS 1907 - 21 Nov 2005 VOL 143 ISS 22 FILE LAST UPDATED: 20 Nov 2005 (20051120/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE					
L6	2	SEA	FILE=REGISTRY ABB=ON	(C8H13O2S2.C7H16NO3.K/MF C	OR C8H13O2S2
		. C7F	116NO3.NA/MF)		
L7	4	SEA	FILE=REGISTRY ABB=ON	C8H13O2S2.C7H16NO3/MF	
L8	1	SEA	FILE=HCAPLUS ABB=ON	L6	
L9	3	SEA	FILE=HCAPLUS ABB=ON	L7 -	• •
L10	19	SEA	FILE=REGISTRY ABB=ON	THIOCTIC	
L11	3	SEA	FILE=REGISTRY ABB=ON	L10 AND CARNITIN?	
L12	2389	SEA	FILE=REGISTRY ABB=ON	16.186.1/RID	
L13	144	SEA	FILE=REGISTRY ABB=ON	L12 AND SALT	
L14	30	SEA	FILE=REGISTRY ABB=ON	L13 AND AMINIUM	1
L15	10	SEA	FILE=REGISTRY ABB=ON	L14 AND PROPANAMINIUM	
L16	2	SEA	FILE=HCAPLUS ABB=ON	L11	
L17	3	SEA	FILE=HCAPLUS ABB=ON	L15	1
L18	4	SEA	FILE=HCAPLUS ABB=ON	L8 OR L9 OR L16 OR L17	v
		_			

=> D L18 BIB ABS IND HITSTR 1-4

only 4 CA references to the Compounds L18 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

2005:1878 HCAPLUS AN

DN 142:86696

TT Treatment of skin damage using acetyl carnitine and lipoic acid

TN Perricone, Nicholas V.

PΑ

SO U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DT Patent

LA English

PAN.	CIVIT I						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	US 2004265345	A1	20041230	US 2003-609777	20030630		
PRAT	US 2003-609777		20030630				

A composition containing both acetyl carnitine and lipoic acid are topically AB applied to treat skin damage, such as contact dermatitis, atopic dermatitis, xerosis, eczema, rosacea, seborrhea, psoriasis, thermal and radiation burns, other types of skin inflammation, and aging. Typical compns. contain from about 0.025% to about 5%, more narrowly from about 0.5% to about 2% by weight acetyl carnitine, and from about 0.1% to about %, more narrowly from about 0.25% to about 5% lipoic acid or lipoic acid derivative in a dermatol. acceptable carrier that contains phosphatidylcholine. Many embodiments also contain at least one adjunct ingredient such as tyrosine, a fatty acid ester of ascorbic acid such as ascorbyl palmitate, a α -hydroxy acid such as glycolic acid, and/or folic acid. A preferred embodiment contains acetyl carnitine, lipoic acid, and tyrosine.

TC ICM A61K031-385

ICS A61K031-205; A61K031-375; A61K031-198

INCL 424401000; 514440000; 514554000; 514474000; 514557000; 514567000

1-12 (Pharmacology)

Section cross-reference(s): 63

ST skin damage treatment acetyl carnitine lipoate compn

TT Skin, disease

> (aging, treatment of; treatment of skin damage using acetyl carnitine and lipoic acid)

IT Radiation

```
(damage, burns, treatment of; treatment of skin damage using acetyl
        carnitine and lipoic acid)
IT
     Skin, disease
        (damage; treatment of skin damage using acetyl carnitine and lipoic
        acid)
IT
     Skin, disease
        (dry, xerosis, treatment of; treatment of skin damage using acetyl
        carnitine and lipoic acid)
     Carboxylic acids, biological studies
IT
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (hydroxy, composition further containing; treatment of skin damage using acetyl
        carnitine and lipoic acid)
IT
     Drug delivery systems
        (ointments, creams; treatment of skin damage using acetyl carnitine and
        lipoic acid)
IT
     Acids, biological studies
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (oxo, composition further containing; treatment of skin damage using acetyl
        carnitine and lipoic acid)
     Skin, disease
IT
        (rosacea, treatment of; treatment of skin damage using acetyl carnitine
        and lipoic acid)
IT
     Burn
        (thermal and radiation, treatment of; treatment of skin damage using
        acetyl carnitine and lipoic acid)
     Drug delivery systems
ŢΤ
        (treatment of skin damage using acetyl carnitine and lipoic acid)
IT
     Lecithins
     Phosphatidylcholines, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (treatment of skin damage using acetyl carnitine and lipoic acid)
IT
     Dermatitis
     Eczema
     Psoriasis
     Seborrhea
        (treatment of; treatment of skin damage using acetyl carnitine and
        lipoic acid)
IT
     50-81-7D, Ascorbic acid, fatty acid esters
                                                  59-30-3, Folic acid,
     biological studies 60-18-4, L-Tyrosine, biological studies 79-14-1,
     Glycolic acid, biological studies 137-66-6, Ascorbyl palmitate
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (composition further containing; treatment of skin damage using acetyl carnitine
        and lipoic acid)
IT
     462-20-4, Dihydrolipoic acid 462-20-4D, Dihydrolipoic acid, esters,
     amides, salts 1077-28-7, dl-Lipoic acid 1077-28-7D, dl-Lipoic acid,
     derivs., esters, amides, salts 3040-38-8, L-Acetyl carnitine
     14992-62-2, Acetyl carnitine 816416-95-2 816416-96-3
     816416-97-4 816416-98-5
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (treatment of skin damage using acetyl carnitine and lipoic acid)
IT
    816416-95-2 816416-96-3 816416-98-5
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (treatment of skin damage using acetyl carnitine and lipoic acid)
RN
     816416-95-2 HCAPLUS
CN
     1-Propanaminium, 2-(acetyloxy)-3-carboxy-N,N,N-trimethyl-, inner salt,
```

SACKEY 10/698451 11/21/2005

Page 4

mixt. with 1,2-dithiolane-3-pentanoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14992-62-2 CMF C9 H17 N O4

OAc | | Me₃+N-CH₂-CH-CH₂-CO₂-

CM 2

CRN 1077-28-7 CMF C8 H14 O2 S2

S (CH₂)₄-CO₂H

RN 816416-96-3 HCAPLUS
CN 1-Propanaminium, 2-(acetyloxy)-3-carboxy-N,N,N-trimethyl-, inner salt,
(2R)-, mixt. with 1,2-dithiolane-3-pentanoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 3040-38-8 CMF C9 H17 N O4

Absolute stereochemistry.

CM 2

CRN 1077-28-7 CMF C8 H14 O2 S2

 $_{\rm S}$ $_{\rm CH_2)_4-co_2H}$

RN 816416-98-5 HCAPLUS
CN L-Tyrosine, mixt. with 2-(acetyloxy)-3-carboxy-N,N,N-trimethyl-1propanaminium inner salt and 1,2-dithiolane-3-pentanoic acid (9CI) (CA
INDEX NAME)

CM 1

CRN 14992-62-2 CMF C9 H17 N O4

CM 2

CRN 1077-28-7 CMF C8 H14 O2 S2

3 CM

CRN 60-18-4 CMF C9 H11 N O3

Absolute stereochemistry. Rotation (-).

L18 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:905631 HCAPLUS

DN 141:384305

ΤI Basic salt of thioctic acid with L-carnitine

IN Salvi, Annibale; Villani, Flavio; Nardi, Antonio; De Angelis, Bruno

PΑ Italy

U.S. Pat. Appl. Publ., 5 pp. SO

CODEN: USXXCO

DTPatent

English LA

F.	FAN.CNT 1																	
	PATE	ENT N	10.			KIN	D :	DATE		i	APPL	ICAT:	ION I	NO.		D	ATE	
							-									-		
P	I US 2	0042	1487	79		A1		2004	1028	1	US 2	003-	6984	51		2	0031	103
	WO 2	WO 2004094403 A1			20041104			WO 2003-EP12179				20031031						
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW.	MX,	MZ,	NI,	NO,

ST

IT

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RN

CN

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NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI IT 2003-MI831
                         Α
                               20030422
    A process for the preparation of a salt of thioctic acid with L-carnitine is
    disclosed: Thioctic acid (50.5 g) are dissolved in 750 mL Me Et ketone at
    20-25° and a solution of 15.5 g KOH pellets (0.249 mol) and 39.5 g
     (0.245 mol) L-carnitine in 200 mL MeOH are added dropwise in 15-20 min.
    The solution is heated to 30-35° and the solvent is distilled to reach an
     internal volume of 330-350 mL. After complete distillation 600 mL of Me Et ketone
    are added and the mixture is left 25-30° for 30 min. Thioctic
    carnitine potassium salt (77 g) is obtained.
    ICM A61K031-385
    ICS C07D339-02
INCL 514440000; 549039000
    63-6 (Pharmaceuticals)
    Section cross-reference(s): 18
    thioctic acid carnitine salt prepn; diet supplement thioctic acid
    carnitine salt prepn; pharmaceutical thioctic acid carnitine salt prepn
    Alcohols, uses
    RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical
    process); PYP (Physical process); PROC (Process); USES (Uses)
        (C1-5; preparation of salt of thioctic acid with carnitine)
    Drug delivery systems
        (preparation of salt of thioctic acid with carnitine)
    Esters, uses
    RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical
    process); PYP (Physical process); PROC (Process); USES (Uses)
        (preparation of salt of thioctic acid with carnitine)
        (supplements; preparation of salt of thioctic acid with carnitine)
    248914-30-9P, (R)-(+)-Thioctic acid salt with L-carnitine
    248914-32-1P, (S)-(-)-Thioctic acid salt with L-carnitine
    248914-34-3P, Thioctic acid salt with L-carnitine
    784200-62-0P 784200-63-1P 784200-65-3P
    784200-67-5P
    RL: FFD (Food or feed use); SPN (Synthetic preparation); THU (Therapeutic
    use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of salt of thioctic acid with carnitine)
    75-05-8, Acetonitrile, uses
    RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical
    process); PYP (Physical process); PROC (Process); USES (Uses)
        (preparation of salt of thioctic acid with carnitine)
    541-15-1, L-Carnitine 1077-28-7, Thioctic acid
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of salt of thioctic acid with carnitine)
    248914-30-9P, (R)-(+)-Thioctic acid salt with L-carnitine
    248914-32-1P, (S)-(-)-Thioctic acid salt with L-carnitine
    248914-34-3P, Thioctic acid salt with L-carnitine
    784200-62-0P 784200-63-1P 784200-65-3P
    784200-67-5P
    RL: FFD (Food or feed use); SPN (Synthetic preparation); THU (Therapeutic
    use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of salt of thioctic acid with carnitine)
    248914-30-9 HCAPLUS
    1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, (2R)-,
    (3R)-1,2-dithiolane-3-pentanoate (salt) (9CI) (CA INDEX NAME)
```

CM 1

CRN 248914-37-6 CMF C8 H13 O2 S2

Absolute stereochemistry. Rotation (+).

CM 2

CRN 44984-08-9 .CMF C7 H16 N O3

Absolute stereochemistry. Rotation (-):

RN 248914-32-1 HCAPLUS

CN 1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, (2R)-, (3S)-1,2-dithiolane-3-pentanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 248914-39-8

CMF C8 H13 O2 S2

'Absolute stereochemistry. Rotation (-).

CM 2

CRN 44984-08-9 CMF C7 H16 N O3

Absolute stereochemistry. Rotation (-).

RN 248914-34-3 HCAPLUS

CN 1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, (2R)-, 1,2-dithiolane-3-pentanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 44984-08-9 CMF C7 H16 N O3

Absolute stereochemistry. Rotation (-).

CM 2

CRN 1077-29-8 CMF C8 H13 O2 S2

RN 784200-62-0 HCAPLUS

CN 1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, (2R)-, 1,2-dithiolane-3-pentanoate, monopotassium salt (9CI) (CA INDEX NAME)

CM 1

CRN 248914-34-3

CMF C8 H13 O2 S2 . C7 H16 N O3

CM 2

CRN 44984-08-9

CMF C7 H16 N O3

Absolute stereochemistry. Rotation (-).

CM 3

CRN 1077-29-8 CMF C8 H13 O2 S2

S
$$(CH_2)_4 - CO_2$$

RN 784200-63-1 HCAPLUS

CN: 1-Propanaminium; 3-carboxy-2-hydroxy-N,N,N-trimethyl-, (2R)-, 1,2-dithiolane-3-pentanoate, monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 248914-34-3

CMF C8 H13 O2 S2 . C7 H16 N O3

CM 2

CRN 44984-08-9 CMF C7 H16 N O3

Absolute stereochemistry. Rotation (-).

CM 3

CRN 1077-29-8 CMF C8 H13 O2 S2

$$\begin{array}{c} S \\ S \\ \end{array} \begin{array}{c} (CH_2)_{4} - CO_2 - CO$$

RN 784200-65-3 HCAPLUS

CN 1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, inner salt, (2R)-, compd. with magnesium 1,2-dithiolane-3-pentanoate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 710351-22-7

CMF C8 H14 O2 S2 . 1/2 Mg

●1/2 Mg

3

CM 2

CRN 541-15-1 CMF C7 H15 N O3

Absolute stereochemistry. Rotation (-).

RN 784200-67-5 HCAPLUS

CN 1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, inner salt, (2R)-, compd. with calcium 1,2-dithiolane-3-pentanoate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 710351-21-6 CMF C8 H14 O2 S2 . 1/2 Ca

●1/2 Ca

CM 2

CRN 541-15-1 CMF C7 H15 N O3

Absolute stereochemistry. Rotation (-).

```
ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
L18
AN
     1999:708603 HCAPLUS
     131:317793
DN
     Use of \alpha-lipoic acid to reduce appetite and/or body weight
TI
     Dean, Joan; Schuhbauer, Hans; Von Seyerl, Joachim; Pischel, Ivo; Weiss,
IN
     Stefan
PA
     SKW Trostberg A.-G., Germany
     PCT Int. Appl., 24 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     German
FAN.CNT 1
     PATENT NO.
                          KIND
                                  DATE
                                              APPLICATION NO.
                                                                       DATE
                           ----
                                  -----
PΙ
     WO 9955331
                           A1
                                  19991104
                                               WO 1999-EP2776
                                                                        19990423
         W: CA, CZ, HU, JP, NO, PL, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
              PT, SE
     DE 19818563
                            A1
                                  19991028
                                               DE 1998-19818563
     DE 19818563
                            C2
                                  20030417
PRAI DE 1998-19818563
                           Α
                                  19980425
os
     MARPAT 131:317793
     The invention relates to the use of R-\alpha-lipoic acid and/or
AB
     S-\alpha-lipoic acid and/or one of its physiol. biocompatible salts to
     reduce appetite and/or body weight, at a preferred daily dose of between 10 mg and 10 g of the free acid form. Recommended single doses are between
     10 mg and 5 g of either \alpha-lipoic acid variant and are administered
     orally, especially to patients with a body mass index (BMI) >25 kg/m2,
     preferably in the form of a nutritional supplement as part of an
     antiobesity therapy.
     ICM A61K031-385
IC
     1-10 (Pharmacology)
CC
     Section cross-reference(s): 18, 63
ST
     lipoic acid appetite body wt redn; obesity treatment nutritional
     supplement lipoic acid
IT
     Amino acids, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
         (basic, \alpha-lipoic acid salts; \alpha-lipoic acid to reduce
        appetite and/or body weight)
IT
     Amines, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (cyclic, \alpha-lipoic acid salts; \alpha-lipoic acid to reduce
        appetite and/or body weight)
     Amines, biological studies
TT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (diamines, \alpha-lipoic acid salts; \alpha-lipoic acid to reduce
        appetite and/or body weight)
IT
     Nutrition, animal
        (nutritional supplement; α-lipoic acid to reduce appetite and/or
        body weight)
IT
     Drug delivery systems
        (oral; \alpha-lipoic acid to reduce appetite and/or body weight)
IT
     Amines, biological studies
```

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(α -lipoic acid salts; α -lipoic acid to reduce appetite and/or body weight)

IT Antiobesity agents

Appetite depressants

Body weight

IT

 $(\alpha$ -lipoic acid to reduce appetite and/or body weight)

IT Alkali metal salts

Alkaline earth salts

Salts, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 $(\alpha\text{-lipoic acid}; \alpha\text{-lipoic acid to reduce appetite and/or body weight)}$

1077-27-6, S- α -Lipoic acid 1077-27-6D, S- α -Lipoic acid, 1077-28-7, 1,2-Dithiolane-3-pentanoic acid 1077-28-7D, 1,2-Dithiolane-3-pentanoic acid, salts 1200-22-2, R-α-Lipoic acid 1200-22-2D, R-α-Lipoic acid, salts 14358-90-8 94599-85-6 176110-59-1 176110-60-4 137314-40-0 176110-58-0 176110-61-5 176110-66-0 176110-67-1 176110-68-2 176110-69-3 176110-75-1 176110-79-5 176110-76-2 176110-80-8 248913-97-5 248913-98-6 248913-99-7 248914-00-3 248914-01-4 248914-02-5 248914-03-6 248914-04-7 248914-05-8 248914-06-9 248914-07-0 248914-08-1 248914-09-2 248914-10-5 248914-11-6 248914-12-7 248914-13-8 248914-14-9 248914-18-3 248914-15-0 248914-16-1 248914-17-2 248914-19-4 248914-25-2 248914-22-9 248914-29-6 **248914-30-9** 248914-32-1 248914-34-3 248914-36-5 248914-38-7 248914-41-2 248914-40-1 248914-42-3 248914-43-4 248914-44-5 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 $(\alpha$ -lipoic acid to reduce appetite and/or body weight)

IT 248914-30-9 248914-32-1 248914-34-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 $(\alpha$ -lipoic acid to reduce appetite and/or body weight)

RN 248914-30-9 HCAPLUS

1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, (2R)-, (3R)-1,2-dithiolane-3-pentanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 248914-37-6 CMF C8 H13 O2 S2

Absolute stereochemistry. Rotation (+).

CM 2

CRN 44984-08-9 CMF C7 H16 N O3

Absolute stereochemistry. Rotation (-).

RN 248914-32-1 HCAPLUS

CN 1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, (2R)-, (3S)-1,2-dithiolane-3-pentanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 248914-39-8 CMF C8 H13 O2 S2

Absolute stereochemistry. Rotation (-).

CM 2

CRN 44984-08-9

CMF C7 H16 N O3

Absolute stereochemistry. Rotation (-).

RN 248914-34-3 HCAPLUS

1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, (2R)-,-1,2-dithiolane-3-pentanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 44984-08-9

CMF C7 H16 N O3

Absolute stereochemistry. Rotation (-).

CM 2

CRN 1077-29-8 CMF C8 H13 O2 S2

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1967:520167 HCAPLUS

DN 67:120167

TI Betaine or caritine thioctate for treatment of hepatic and anoretic complaints

PA Centre d'Etudes et de Realisations Therapeutiques (C.E.R.E.T.)

SO Fr. M., 3 pp. CODEN: FMXXAJ

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI FR 4512 19661121 FR 19650518

- AB The salts are obtained by the reaction of thioctic acid with betaine or carnitine hydrate. The LD50 (white mice) of betaine thioctate (I) is 0.45 g./kg. by intraperitoneal and 5.6 g./kg. by oral application; the LD50 of carnitine thioctate (II) is 0.35 g./kg. by intraperitoneal and 3.8 g./kg. by oral application. The two products have hepato-protective and bioenergetic properties. They are effective against all hepatic insufficiencies when used as tablets, capsules, or drinking solns., e.g. 0.25 g. I or II in 10 ml. distilled water.
- IC A61K; C07C; D
- CC 63 (Pharmaceuticals)
- ST BETAINE THIOCTATE; CARNITINE THIOCTATE; LIVER INFECTION DRUG; APPETITE STIMULANT; BIOENERGETIC AGENT; HEPATO-PROTECTIVE AGENT; THIOCTIC ACID SALTS
- IT Liver, diseases or disorders

(betaine or carnitine thioctate in treatment of)

IT 17747-20-5 18428-73-4

RL: BIOL (Biological study)

(pharmaceutical compns. containing, in liver disorder treatment)

IT 17747-20-5

RL: BIOL (Biological study)

(pharmaceutical compns. containing, in liver disorder treatment)

RN 17747-20-5 HCAPLUS

CN Ammonium, (3-carboxy-2-hydroxypropyl)trimethyl-, 1,2-dithiolane-3-valerate (8CI) (CA INDEX NAME)

CM 1

CRN 44985-71-9 CMF C7 H16 N O3 SACKEY 10/698451 11/21/2005

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$$\begin{array}{c} & \text{OH} \\ | \\ \text{Me}_3\text{+N-CH}_2\text{-CH-CH}_2\text{-CO}_2\text{H} \end{array}$$

CM 2

CRN 1077-29-8 CMF C8 H13 O2 S2